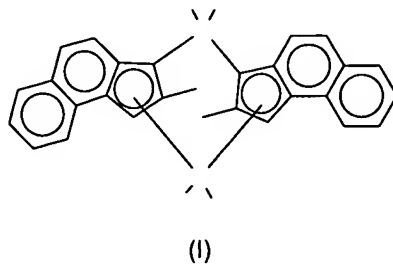


Abstract

The present invention relates to a specific process for the diastereoselective synthesis of rac-  
5 diorganosilylbis(2-methylbenzo[e]indenyl)zirconium compounds of the formula I,

10



15 by reacting the silyl-bridged bisindenyl ligand with a dihalozirconium bis(3,5-di-tert-butylphenoxide)-base adduct to form the diorganosilylbis(2-methylbenzo[e]indenyl)zirconium bis(3,5-di-tert-butylphenoxide) and subsequently replacing the phenoxide groups by X using  
suitable replacement reagents to give the compound of the formula I; where the substituents X  
can be identical or different and are each F, Cl, Br, I or linear, cyclic or branched C<sub>1-10</sub>-alkyl; and  
20 the substituents R can be identical or different and are each linear, cyclic or branched C<sub>1-10</sub>-alkyl or C<sub>6-10</sub>-aryl; and also to the use of these compounds as catalysts.